

# Medialon Manager 4

## Medialon / AMX Integration Guide



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# PRESENTATION

AMX is a worldwide leader in Remote Control systems offering a wide range of controllers, keypads and touch panel.

With smart processors and powerful memory reserves, the AMX NetLinx© Controllers can simultaneously carry out multiple commands to produce instant, flawless results from the devices they control.

The AMX Touch Panels control and automate the electronics that make operations run more efficiently. With an ultra user-friendly interface, complex sequences of commands can be transformed into magical results - literally at the touch of a button.

For more information about AMX: <http://www.amx.com>

When connected to a Medialon system via Ethernet, AMX NetLinx© Controllers offer their hardware resources to Medialon Manager Software. There is no need for programming in the AMX NetLinx© itself (only the AMX/Medialon protocol driver downloaded in the NetLinx©), Medialon Manager 4 remains the master and sends commands from its own MxMs and drivers.

At this date, all Serial MxMs, Medialon I/O MxM and the new Medialon Infrared MxM can be used with AMX NetLinx©. In addition, AMX brings a huge list of Infrared drivers. (DMX and MIDI integration will be available 2008 Q1)

AMX Modero© Panels interfaces are programmed using TPDesign4 software, links are created in Medialon Manager 4 to trigger task and monitor variables.

The combination of the two systems, Medialon Manager 4 powerful Show Control software and AMX highly reliable hardware create the best solution for many applications where Timeline, accurate synchronization, logical operations, database links, digital media control, wide network deployment etc ... are necessary.

This document describes the integration of AMX Hardware in a Medialon Manager 4 system. The reader is supposed to have a minimum knowledge about Medialon Manager 4 setup and programming.

# MEDIALON MANAGER 4 AND AMX RESOURCES ADDRESSING

## [Device:Port:System]

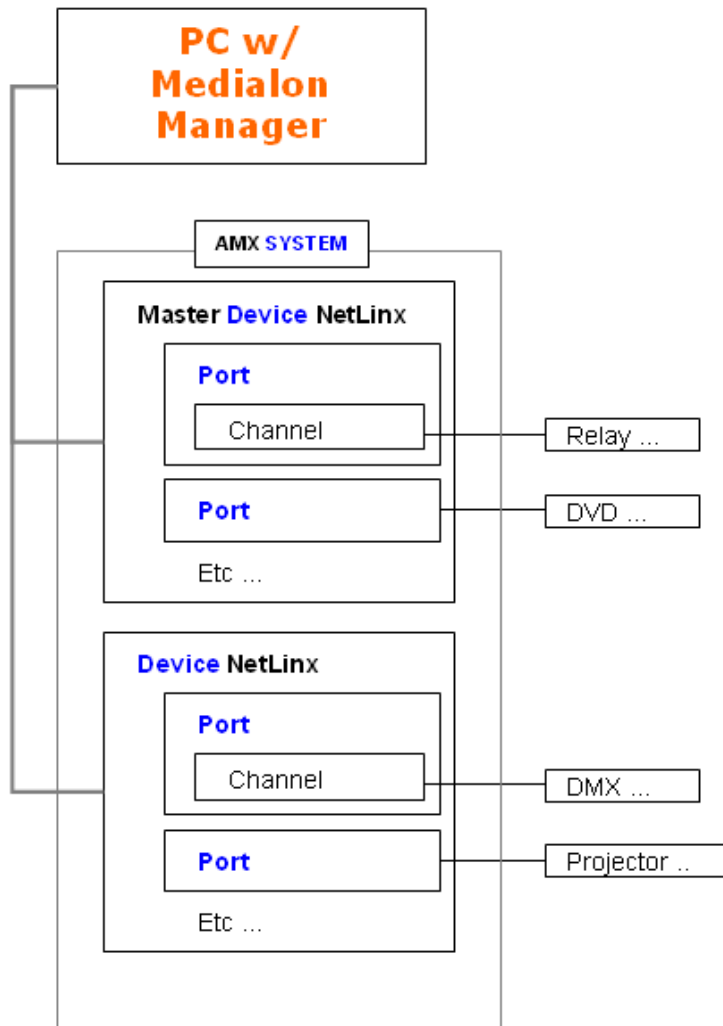
AMX hardware is made of:

- Integrated controllers with Ethernet input to connect to the network, and a various number of outputs, from Serial to Infrared and relays. Output depends of the integrated controller model.
- Integrated Card cage Controllers with Ethernet input to connect to the network and a number of slots in which various type of output cards can be inserted, from Serial to Infrared and relays, Midi etc ...
- Modero© Touch Panel with Ethernet input to connect to the network wired or wireless.

All connected devices ie: a DVD player on a Serial port, but also buttons on a Panel page, have a unique address in the system, the DPS [Device:Port:System].

The AMX [Device:Port:System] addressing scheme is used to uniquely identify an AMX resource.

- An AMX installation can be made of one or several 'Systems'. Each 'System' owns a master device which is connected to the network and has a unique System ID.
- Besides the master, a system is composed of one or several 'Devices' connected to the master. Each of these 'Devices' (master included) has a unique Device ID in the scope of the system.
- Each resource of a device is defined by a port ID, unique in the scope of the device. Usually, this port ID is written at the back of the device.



In order to access a specific AMX resource from Medialon Manager 4, you have to know the triplet identifier [Device:Port:System] and the system master IP (the default TCP port is 60000).

Basically, Manager communicates with a master of a system and accesses a specific resource by specifying the [D:P:S].

# Channel and Level

In some cases, the triplet [Device:Port:System] is not enough to specify precisely only one single resource, for example, one specific relay on a NetLinx® Controller. Therefore, you must specify a channel or level number.

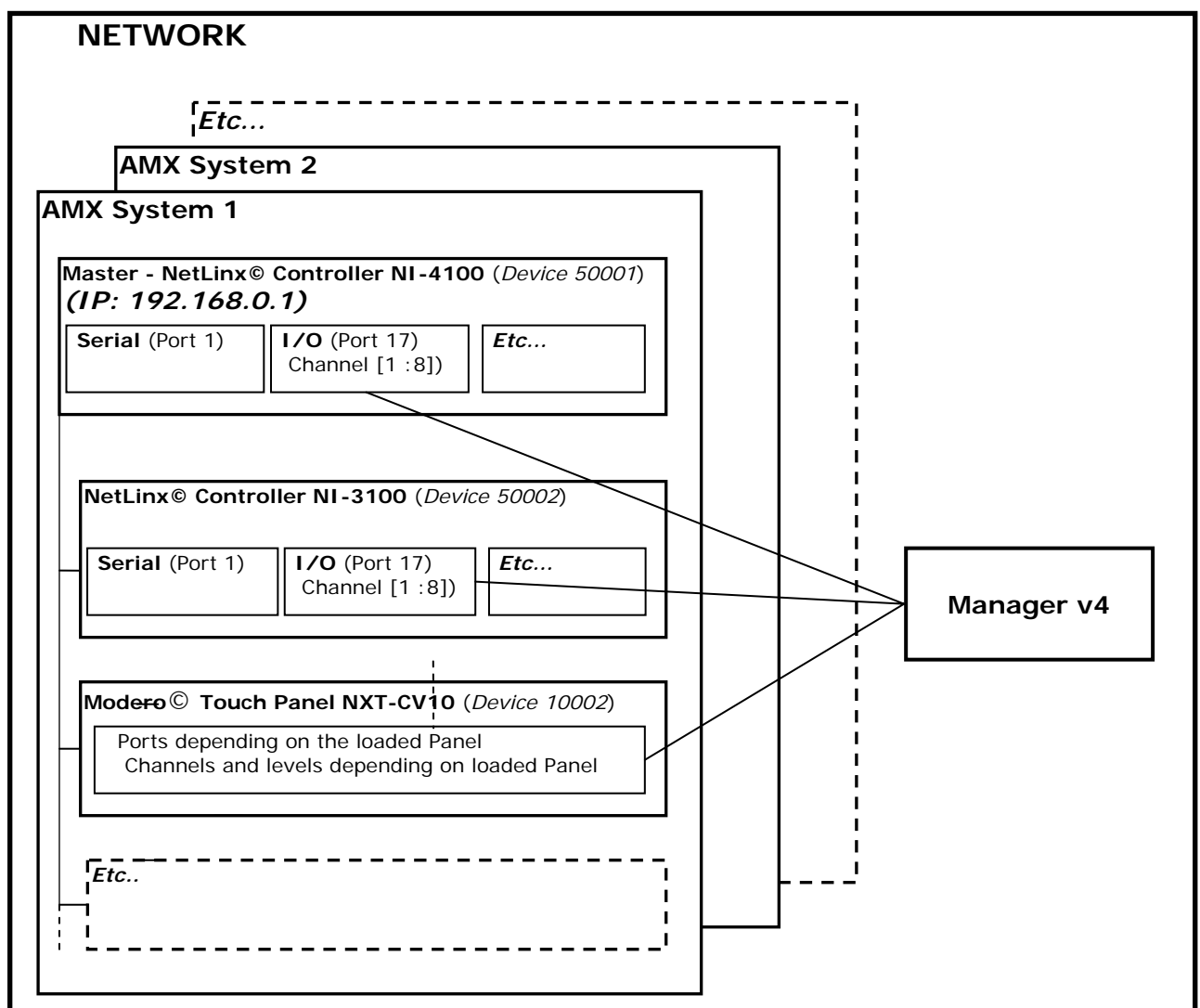
## Channel

'Channel' number will be used for digital I/Os, for example a relay on a NetLinx® controller or a button on a Touch Panel.

## Level

'Level' will be used for analog I/Os, for example an output of an analog card on a NetLinx® Controller or a slider on a Touch Panel.

**NB:** it is possible to show each Port and Level/Channel for each object/resource on the Touch Panel screen by selecting "Function Show" in the Protected Setup of the Touch Panel.



# AMX RESOURCES IN MEDIALON MANAGER 4

## Software requirements

In order to access the AMX resources from Medialon Manager 4, you need to have the following software installed:

- Medialon Manager version 4.2 or higher
- MxM Medialon I/O
- MxM Medialon Infrared
- AMX/Medialon protocol driver downloaded in NetLinX©.

## Resources proposed by AMX

By using AMX resources, you'll be able to access to:

- Serial resources
- I/O resources
- Infrared resources

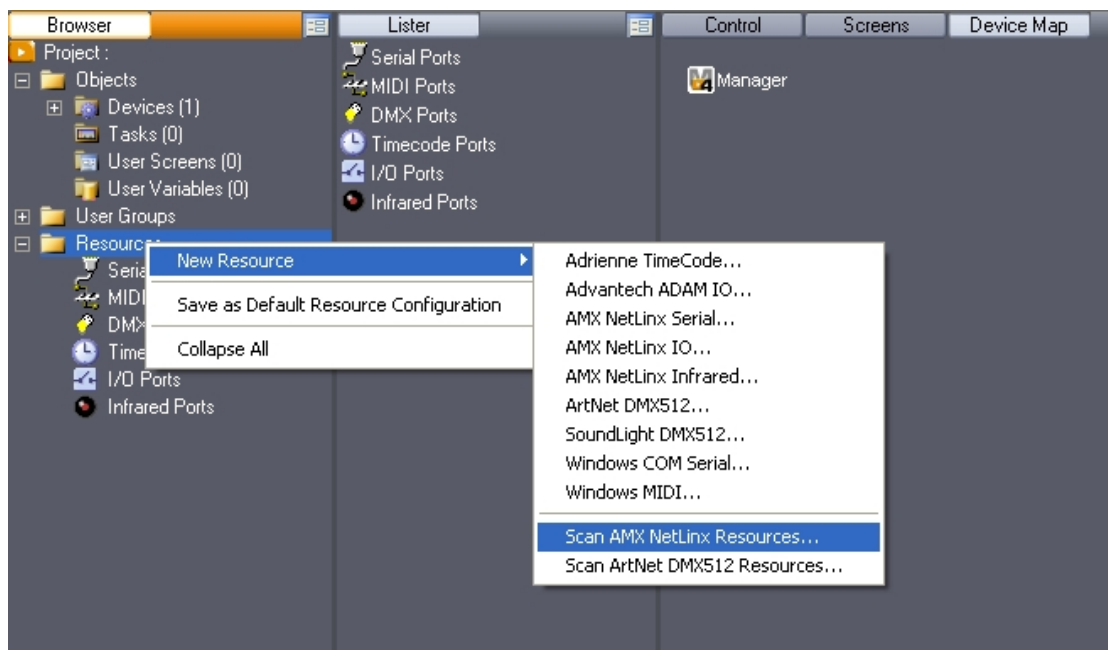
## Creating a resource

There are 2 ways to create a resource:

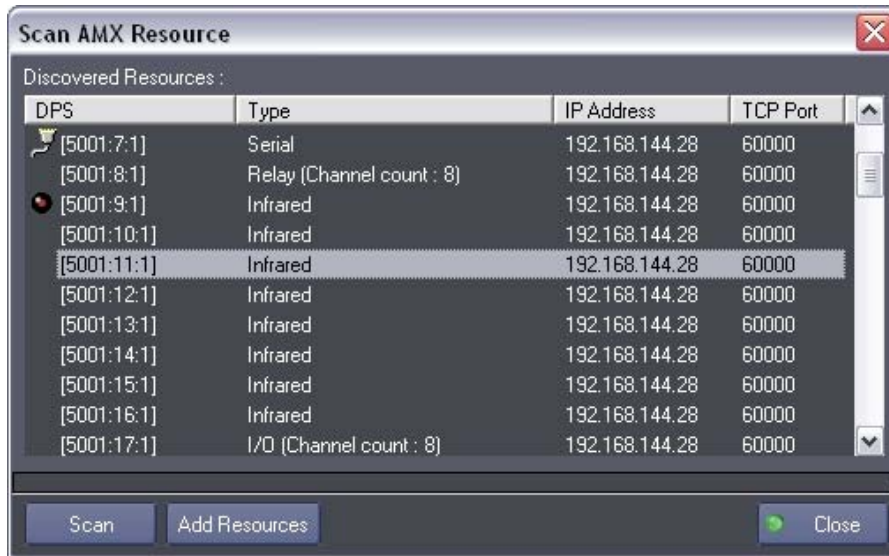
- by scanning available AMX resources on the network
- by creating a resource manually

## Scanning available AMX resources

Right click on the 'Resources' node in the browser of Manager, and choose 'Scan AMX NetLinX Resources'



The scan process starts and displays all of the resources found on the network:

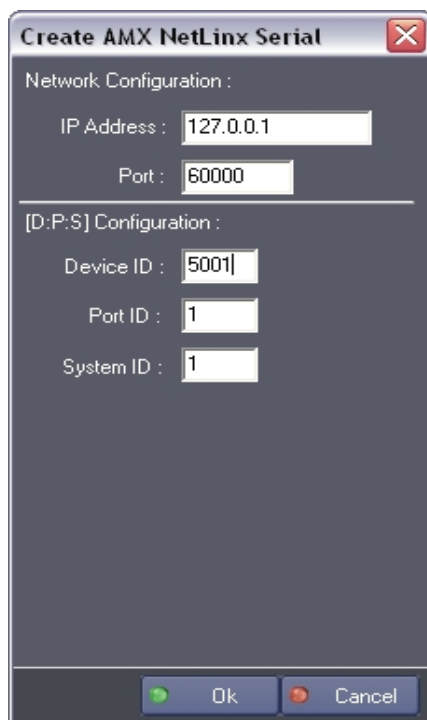


An icon next to a resource means that the resource is already declared in Medialon Manager. To add resources, select 'resources' and click on the 'Add Resources' button.

## Creating a resource manually

### 1. Setup for AMX NetLinx® Serial Resources

- Right click on the 'Resources>Serial Ports' node, and choose 'New Resource>AMX NetLinx Serial...'
- The following setup window appears :

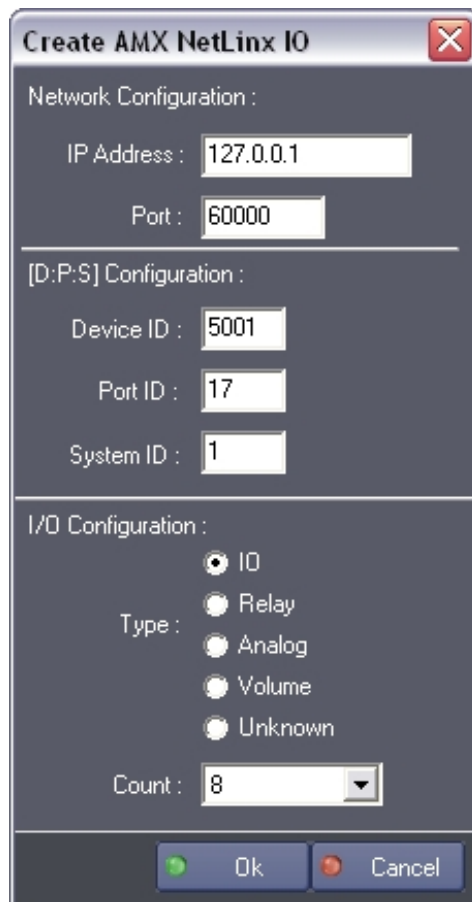


- Enter the IP address of the master (default TCP port is 60000)
- Enter the [D:P:S] of the serial resource to control
- Click on 'OK'
- Close 'Setup Resources' window, the AMX Serial Resource is created!



## 2. Setup for AMX NetLinx® I/O Resources

- Right click on the 'Resources>I/O Ports' node, and choose 'New Resource>AMX NetLinx IO...'
- The following setup window appears:



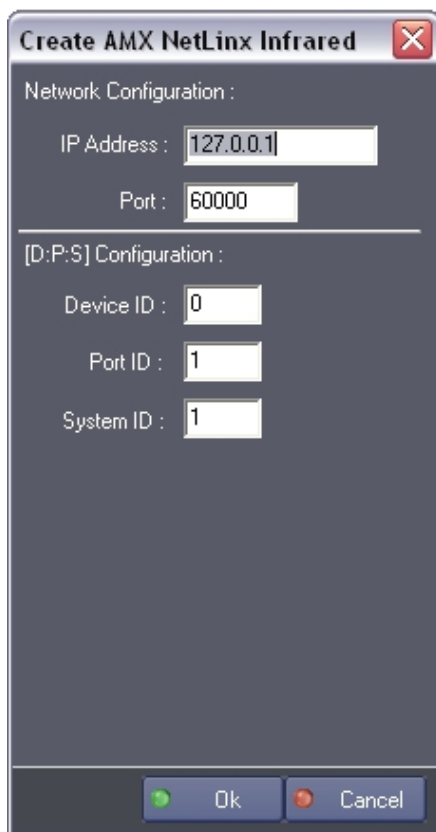
The dialog box is titled 'Create AMX NetLinx IO' and contains three main sections: Network Configuration, [D:P:S] Configuration, and I/O Configuration. The Network Configuration section has fields for IP Address (127.0.0.1) and Port (60000). The [D:P:S] Configuration section has fields for Device ID (5001), Port ID (17), and System ID (1). The I/O Configuration section has a Type dropdown menu with radio buttons for IO (selected), Relay, Analog, Volume, and Unknown, and a Count dropdown menu set to 8. At the bottom are 'Ok' and 'Cancel' buttons.

Section	Field	Value
Network Configuration :	IP Address :	127.0.0.1
	Port :	60000
[D:P:S] Configuration :	Device ID :	5001
	Port ID :	17
	System ID :	1
I/O Configuration :	Type :	IO
	Count :	8

- Enter the IP address of the master (default TCP port is 60000)
- Enter the [D:P:S] of the I/O resource to control
- In the 'I/O Configuration' section, enter the type of I/O and the number of channel
- Click on 'OK'
- Close the 'Setup Resources' window, the AMX I/O Resource is created!

### 3. Setup for AMX NetLinx® Infrared Resources

- Right click on the 'Resources>Serial Ports' node, and choose 'New Resource>AMX NetLinx Infrared...'
- The following setup window appears :



**Create AMX NetLinx Infrared**

Network Configuration :

IP Address : 127.0.0.1

Port : 60000

[D:P:S] Configuration :

Device ID : 0

Port ID : 1

System ID : 1

Ok Cancel

- Enter the IP address of the master (default TCP port is 60000)
- Enter the [D:P:S] of the infrared resource to control
- Click on 'OK'
- Close 'Setup Resources' window, the AMX Infrared Resource is created!

# MxMs USING AMX RESOURCES IN MEDIALON MANAGER 4

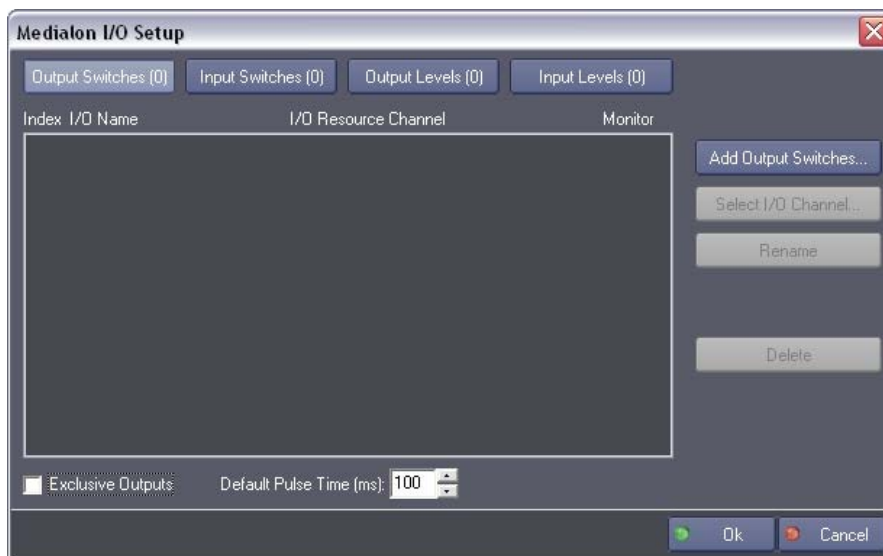
## MxM Medialon I/O

This MxM will allow you to use the different I/O resources offered by AMX products (relay, I/O, analog, etc...).

### Setup for MxM Medialon I/O

NB: This device allows control/use of all the I/O resources created by the user.

- Right click on node: 'Devices', and choose 'New Device...'
- Select 'Medialon I/O', name your new device and press 'OK' to access the Setup
- The following setup window appears:



- Press 'Output Switches' to configure the outputs you want to use
- Press 'Add Output Switches...', the following window appears :



- Click on all the channels you want to use and press 'OK', these channels will be usable by the device. In the 'Medialon I/O Setup' you will be able to monitor variable by clicking checkbox 'Monitor'.
- Repeat the same for 'Input Switches' to configure the inputs channels you want to use.
- Repeat the same for 'Output Levels' to configure the inputs channels you want to use.
- Repeat the same for 'Input Levels' to configure the inputs channels you want to use.
- Once everything is configured, press 'OK' in the 'Medialon I/O Setup'.

## Use of MxM Medialon I/O device

### 1. Cues

- Drag a Medialon 'I/O' device on a track. A popup menu appears. The main cues to use are 'Switches>Set Switch Status' and 'Switches>Switches Memory'
- 'Switches>Set Switch Status' lets you to control one I/O output channel.
- 'Switches>Switches Memory' lets you to control multiple I/O output channels.
- 'Levels>Set Level Status' lets you to control one I/O output level.
- 'Switches>Levels Memory' lets you to control multiple I/O output levels.

### 2. Variables

A variable has been created inside the device for each monitored I/O channels/levels defined in the setup of the device.

## Medialon Infrared

This MxM will allow you to use the infrared resource offered by AMX products.

### Setup for MxM Medialon Infrared

NB: This device allows control/use all the Infrared resources created by the user.

- Right click on node: 'Devices', and choose 'New Device...'
- Select 'Medialon Infrared', name your new device and press 'OK' to access the Setup
- The following setup window appears:

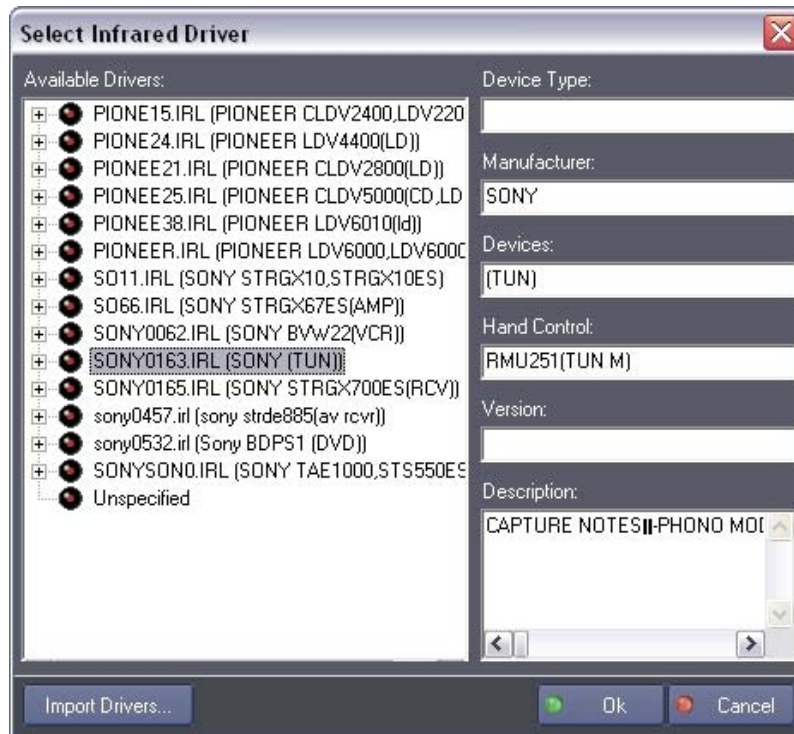


- Press the 'Select...' button next to the 'Infrared Port' to select the right resource.
- The following window appears :



- Click on the channel you want to use and press 'OK', this channel will be usable by the device.
- Press 'Select...' next to the 'Default IR Driver' to select the right driver for the selected resource.

- The following window appears :



- This window displays all possible drivers for the current selected resource. If you want to add a new driver to the library in order to select it, click on 'Import Drivers...'. If you don't want to specify any driver, you can select 'Unspecified' in the list.
- Back to the 'Medialon Infrared Setup', you will be able to load the driver selected into the IR resource by clicking the button 'Load Driver'.  
**Important note: in order to do so, you must have the AMX software: "File Transfer" installed on your computer.**
- Once everything is configured, press 'OK' in the 'Medialon Infrared Setup'

## Use of MxM Medialon Infrared device

### Cues

The Medialon Infrared device allows you to send a command from the selected driver in the setup. You can do so by using the cue 'Send Command'. You have the choice to send a command by name (a wizard allows you to select one of the command existing in the driver) or to send a command by index.